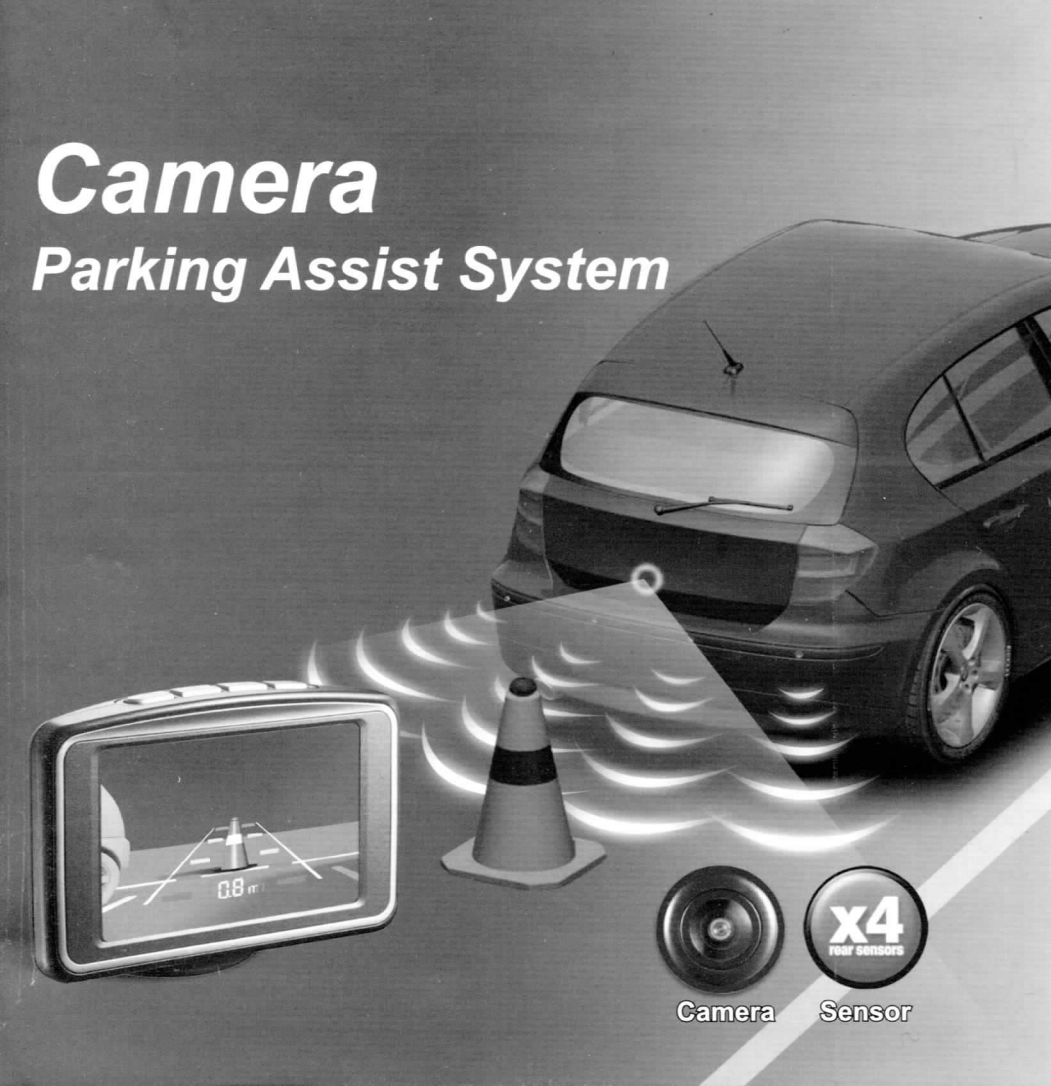

Camera
Parking Assist System
0.8 m
x4
rear sensors
Camera
Sensor

Contents

User's Manual

Disclaimer ---------- 2
Important notice ---------- 2
Key features---------- 2
About the product ---------- 3
About the monitor ---------- 3
Self-test function ---------- 4
How does the system work ---------- 5
OSD setting ---------- 6
Shortcut key ---------- 8
Attention ---------- 10
Sensor and camera maintenance ---------- 10
Troubleshooting ---------- 11
Warranty terms ---------- 12
Warranty card ---------- 12

Installation Manual

Brief installation diagram ---------- 14
Packing list ---------- 15
Installation tools ---------- 15
Wire connection ---------- 16
Sensor installation ---------- 17
Camera installation ---------- 18
ECU installation ---------- 19
Monitor installation ---------- 19
Parking assist lines mode selection and adjustment ---------- 20
Function test after installation ---------- 21

Camera Parking Assist System

User's Manual

Disclaimer

The camera parking assist system is designed as a driver assistance device, and should not be used as a substitute for safe parking practices. The area into which the vehicle is to be reversed must be constantly visually monitored while parking.

We do not guarantee or assume liability for collisions or damages while reversing your vehicle.

Important notice

Camera parking assist systems help to provide assistance when reversing and parking. Driving skills, such as slowing down, use of mirrors etc. are always essential.

1. This unit is for vehicles with 12V DC only.
2. This unit should be installed by a professional auto technician.
3. Route wiring harness away from heat sources and electrical components.
4. It is strongly recommended to check the position of the sensors before the actual drilling of the holes.
5. Perform tests after finishing the installation.

Key features

- TFT LCD monitor with parking assist lines
- OSD menu
- Flush mount or micro-tab camera available
- Shock, vibration and water resistant camera
- PAL or NTSC mode available
- Accurate digital distance and clear rearview shown on the monitor
- Audible warning and voice warning (optional), volume adjustable
- Self-test function
- Anti-false alert technology

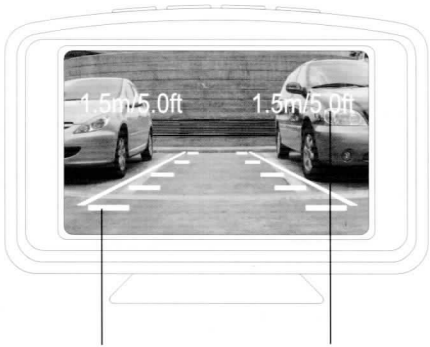
About the product

This camera parking assist system comes with 4 sensors, a camera and a TFT LCD monitor.

Turn ACC on and engage reverse gear, the system will start scanning the rear area. If there is any object within the detection range, the image, digital distances and corresponding parking assist lines will appear on the monitor while the audible sound will change tones when the distance gets shorter (voice warning is optional).

Every piece of our products has passed the most stringent test before releasing to the market. It performs well at a wide temperature range, and becomes very useful when you are reversing at a raining day, snowing day or at night etc. With this camera parking assist system on board, you can enjoy a convenient and nervousfree reversing experience.

About the monitor



※ Your TFT LCD monitor may be different from the drawing above.

1. Rearview on the LCD monitor

The color camera automatically projects the image behind the car to the monitor once the reverse gear is engaged.

2. Parking assist lines

The space between the 2 parking assist lines is equivalent to the width of your vehicle. Any object in that space will hinder your reversing.

The color distance indicator will appear on the monitor when the vehicle is getting closer to the obstacle.

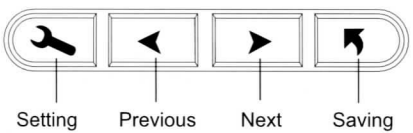
3. Digital distance

Detection range: 0.3~1.5m/1.0~5.0ft.

The distance detected by the sensors will be shown on the left and right side of the monitor. The digital number on the monitor will be refreshed every 0.1m/ 0.1ft.

When the obstacle distance is less than 0.3m/1.0ft, "STOP" will be shown on the monitor and the speaker will beep continuously or say "STOP" (when the voice warning is turned on).

4. Monitor adjustment



1) Setting Button

The button is used to turn on the on-screen-display menu and submenu.

2) Previous button

are used to select the previous menu and submenu

3) Next button

are used to select the next menu and submenu

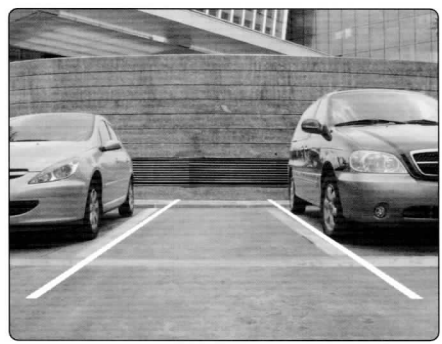
4) Saving button

Press button to save the selection and return to previous menu.

The system will test the sensors automatically when the reverse gear is selected.

1) If all sensors are functioning, the system will beep once.

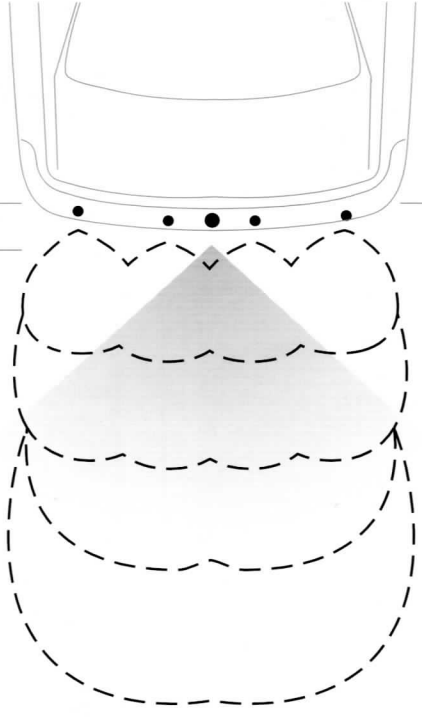
2) If there is any problem with the sensors, the system will beep three times to indicate that one or more sensors are damaged.



※ Any damaged sensors should be replaced ASAP.

This picture indicates all sensors are functioning and the obstacle distance is more than 1.5m/5.0ft.

How does the system work



Buzzer	Voice (Optional)	
Be ———	Stop	
	0.3(m)	1(ft)
	0.4(m)	
	0.5(m)	
Be—Be ——	0.6(m)	2(ft)
	0.8(m)	
Be-Be-Be-Be-		
	1.0(m)	3(ft)
Be--Be--	1.2(m)	4(ft)
	1.5(m)	5(ft)
No Beep		

Display

OSD setting

Once ignition is on, one of the default clock setting will appear as below

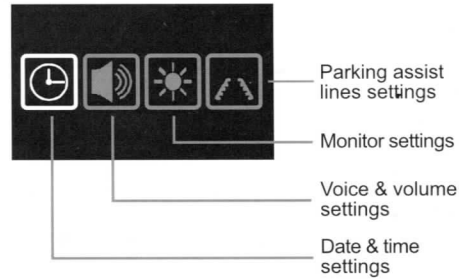
Mode 1

Mode 2

Mode 3

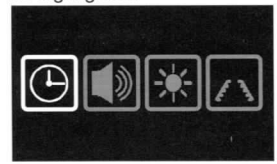
(Factory default)

Press ⚙ to enter the main menu.



1. Date & time settings:

Press ⚙ to enter the main menu, the 🕒 icon will be highlighted.

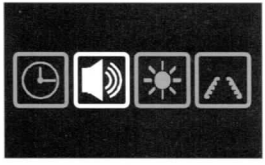


Press ⚙ to enter Date & time settings.

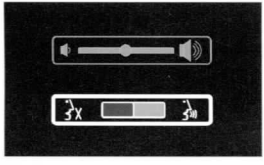
Press ➤ or ◄ to select time, time format, default clock setting and date. Press ↰ button to save the settings and back to the main menu.

Shortcut key for Default clock setting:
Turn ignition on (engine not start), press and hold ↰ for 3 seconds, the buzzer will beep once to enter default clock setting mode. Press ➤ or ◄ to select the default clock setting. Press ↰ to save and exit, or it will save and exit automatically in 3 seconds.

2. Voice & volume settings
Press ↖ to enter the main menu, then press ➤ to choose the CD.

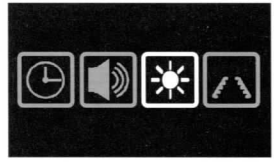


Press ↖ to enter voice & volume settings



Press ➤ or ◄ to adjust volume and select voice warning on/off mode. Press ↰ button to save the settings and back to the main menu.

3. Monitor settings
Press ↖ to enter the main menu, then press ➤ to choose the ☀



Press ↖ to enter the monitor settings

Press ➤ or ◄ to select the suitable level of the brightness, contrast, color and night time mode settings. Press ↰ button to save the settings and back to the main menu.

You can select the night time mode when it is at night, and the brightness of the LCD display will decrease accordingly.

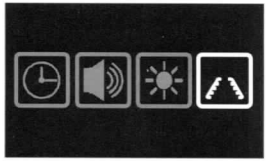
According to your local night time range, you can choose one of the following two night modes:

18:00 18:00 : Time range 18:00~ 6:59 (next morning).

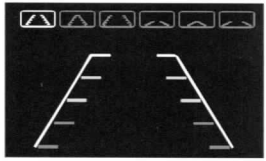
18:00 19:00 : Time range 19:00~5:59 (next morning).

4. Parking assist lines settings

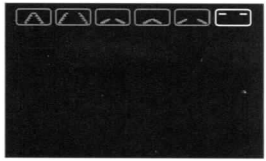
Press ↖ to enter the main menu, then press ➤ to choose the ⛰.



Press ↖ to enter the parking assist lines settings.



Parking assist lines mode on



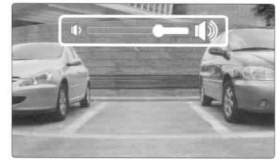
Parking assist lines mode off

Press ➤ or ◄ to select the suitable parking assist lines mode (6 different modes or turn it off). Press ↰ button to save the settings and back to the main menu. Press ➤ to select the ▭ icon to turn off the parking assist lines mode.

Shortcut key

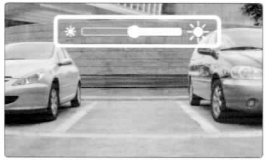
Below are the shortcut methods to adjust volume, voice, brightness and parking assist lines mode.

1. Volume adjustment



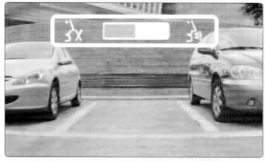
Turn ignition on (engine not start), engage to reverse gear, press ➤ button to increase or press ◄ button to decrease the volume. Press ↰ to save and exit, or it will save and exit automatically in 3 seconds.

2. Brightness adjustment



Turn ignition on (engine not start), engage to reverse gear, short press button to enter Brightness adjustment mode. Press ◄ to ► adjust the brightness. Press button to save and exit, or it will save and exit automatically in 3 seconds.

3. Voice waning on/off



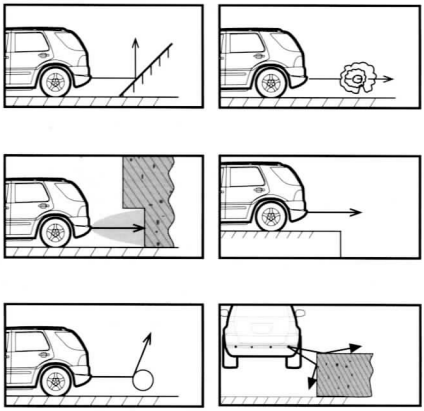
Turn ignition on (engine not start), engage to reverse gear, press button to enter voice warning on/off mode. Press ► or ◄ button to turn on/off the voice warning. Press button to save and exit, or it will save and exit automatically in 3 seconds.

4. Parking assist lines adjustment

Turn ignition on (engine not start), engage to reverse gear, press and hold button for 3 seconds to enter parking assist lines adjustment mode. The parking assist lines flash once. Press ◄ , ► to select the suitable parking assist lines suit for your needs. Press button to save and exit, or it will save and exit automatically in 3 seconds.

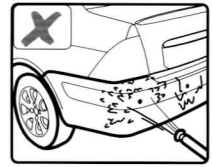
Attention

False detection may occur in the following situations:

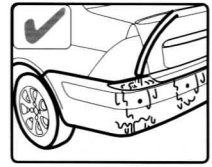


- After installation, please fully test the system before use.
- Heavy rain, dirty or damanged sensor may result in false warning occasionally.
- Ensure that the self-test procedure is completed, the camera and all sensors are functioning before reversing.

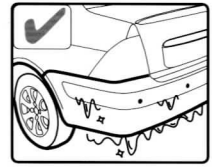
Sensor and camera maintenance



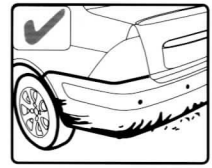
Do not wash the sensors/camera with squirt gun or swab them forcibly.



Please wash car with lowpressure water.



Please melt the ice with warm water when the sensors/camera is covered by ice.



Please clean the sensors/camera with cloth or low-pressure water when the sensors are covered by mud or snow.

Troubleshooting

- **There is no image on the LCD monitor.**

1) Check whether the power supply wire is connected correctly.
2) Check whether the ignition is turned to ACC ON.
3) Check whether the reverse gear is selected.
4) Check whether all the connections are correct.
5) Check whether the video output plug is connected to the video-in socket of the LCD monitor.
6) Check whether the function setting of the monitor is correct.
7) Check whether the camera is correctly connected to the ECU.

- **The monitor indicates a defective sensor.**

1) Check whether the sensor surface is clean.
2) Check whether the sensor wires are plugged in the ECU properly.
3) Check whether the sensor wires are damaged or not.

- **The object position does not correspond to that on the monitor.**

1) Are the sensor cables connected to the ECU in the correct order e.g. A. B. C. D?

- **When reverse gear is selected, 0.5m ~ 0.6m will be shown on the LCD monitor. (No obstacle behind the vehicle)**

1) Check whether sensors are mounted too low or detecting the ground?
2) Check whether the sensor is installed up-side-down.
3) Unplug 1 sensor at a time to check for response.

- **Audible voice or warning sound is too low.**

1) Adjust the volume to a certain level.

- **Blurred image on the LCD monitor?**

1) Check whether there is dirt or water on the lens of the camera.
2) Clean the lens with a wet cotton swab and then dry it with a soft clean cloth.

- **Parking assist lines is too high or too low.**

1) Adjust the parking assist lines properly according to P20 in the manual.

- **If the problem persists, please follow these steps:**

A. For consumers: contact your dealer or nearby service center.
B. For installer or dealer:
1) Check the wire connection.
2) Replace the ECU and recheck the system
3) Test the sensors with certified ECU using a flat wooden board.
4) Plug the certified sensors into the ECU and recheck.
5) Email your questions to us and we will reply ASAP.

Warranty terms

I. The unit is warranted for a limited period of time from the date of purchase. In the unlikely event of a defect arising in this product when used in accordance with the manufacturer's instructions, the parts would be repaired or replaced free of charge.

a) It is required to show warranty card when making any warranty claims.

b) The model and the unit's serial number must be the same as the information on the warranty card.

II. This warranty is non-transferable and is automatically void if:

a) The original purchaser has not completed the warranty card.

b) The unit's serial number is defaced, missing or altered.

c) The unit has been modified or used in a way not to its intended purpose.

d) The unit has been damaged by accident, unreasonable use, neglect, improper installation or service.

III. The warranty does not cover:

a) Damage caused by incorrect or poor installation, problems which may be caused by anomalies in the vehicle's electrical system or originating from the environment in which the system is operated;

b) Damage to the system caused by accident or improper use in any manner whatsoever not the fault of the manufacturer/distributor, including but not limited to damage by water or as a result of excess voltage applied to the system or if misused or repaired or altered in any way other than by the manufacturer or it's authorized agent.

c) False information displayed in the panel of the dash board that is caused by car with CAN bus system.

Warranty card

User:

Tel:

Vehicle Reg No.:

Product Model No.:

Serial No.:

Date of Installation:

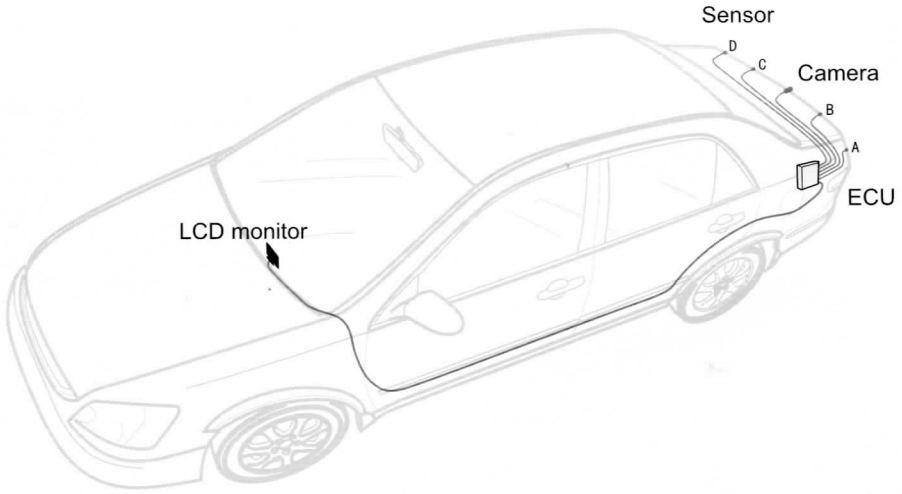
Name of the Retailer:

Signed by Retailer:

Camera Parking Assist System

Installation Manual

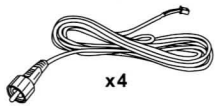
Brief installation diagram



Packing list

※ Sensor

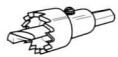
ECU



Sensor cable

※ Monitor

※ Camera



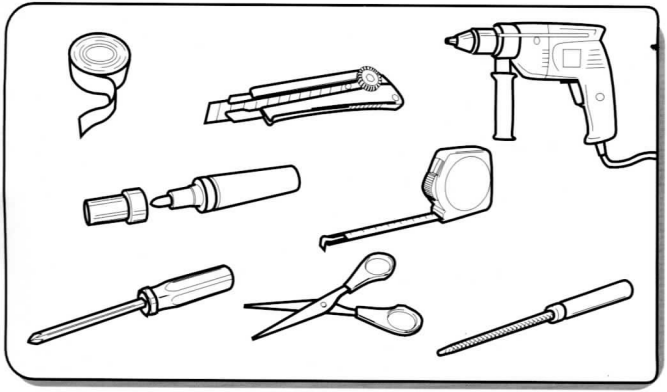
Hole saw

Power harness

Harness

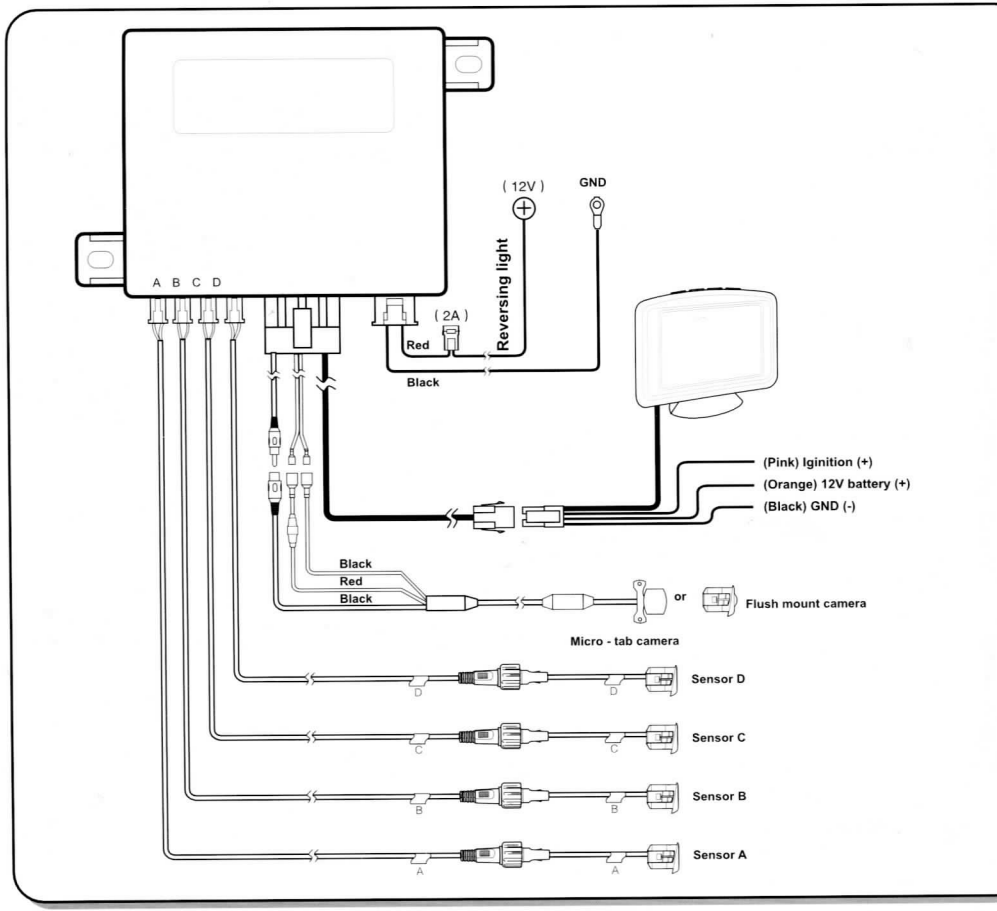
※ The actual sensor/camera or monitor may vary from the image shown above

Installation tools

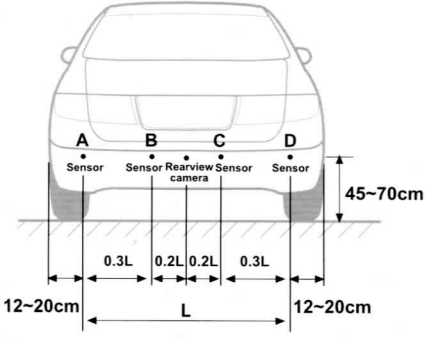


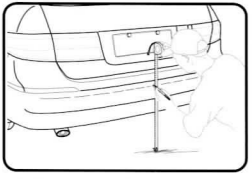
45' ~ 60'

Wire connection

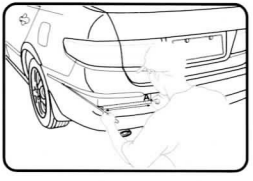


Sensor installation

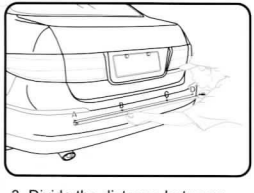




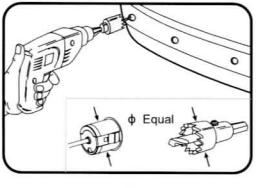
1. Select a proper surface area which is 45~70cm to the ground as a horizontal guideline.



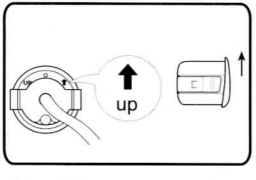
2. Select a smooth surface area along the horizontal guideline, and 12~20cm away from the left and right side. Mark them for A and D sensors.



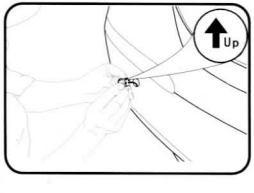
3. Divide the distance between sensor A and D into three parts. Mark the average point for B and C sensor.



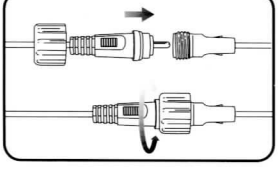
4. Check the size of the hole saw to be matching the diameter of the sensors before drilling any holes.



5. Install the sensor vertically, the "up" sign must be on upside.



6. Install the sensor into the hole and mount firmly in the bumper.

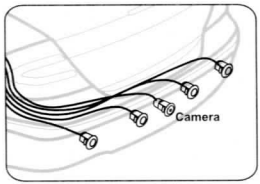


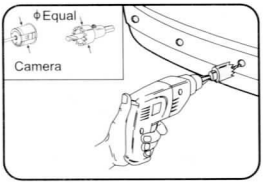
7. Insert the plug into the socket and turn the sealing screw cap tightly.

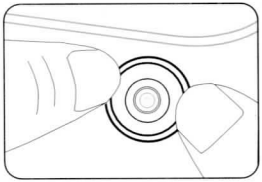
※ The sensor shown above may be different from the product.

Camera installation

Flush mount camera installation

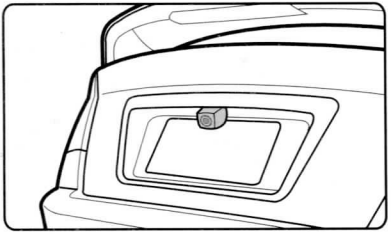


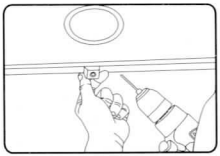




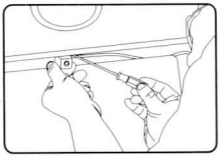
Insert the camera and press into the hole firmly.

Micro - tab camera installation

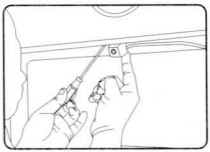


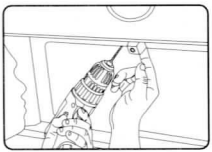


1. Choose a proper place above the number plate and drill a hole.

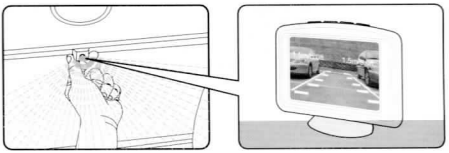


2. Fix one side of the camera with screw



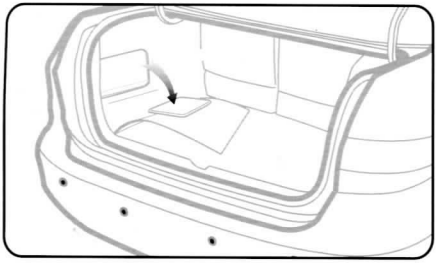


3. Fix the other side of the camera with screw

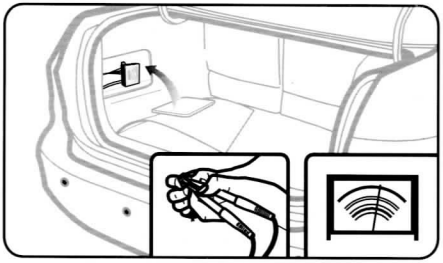


4. Connect the system to the monitor and adjust the camera direction accordingly.

ECU installation

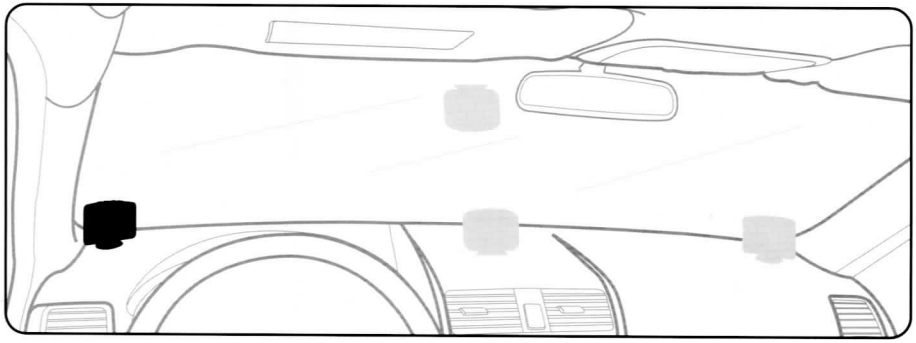


Mount ECU on the driver's side of the trunk.



Connect the red wire to the reversing light wire (+).

Monitor installation



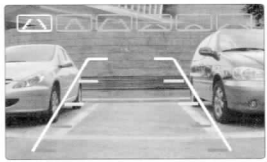
Before fixing the monitor on the dash board, adjust the brightness or contrast of the monitor if needed.

Parking assist lines mode selection and adjustment

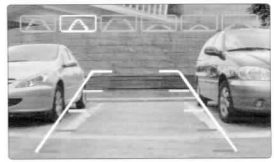
There are 6 different parking assist lines modes to choose from.
Please refer to page 8 or page 9 for Parking assist lines adjustment. According to the width of the vehicle, select a suitable parking assist line, it will assist you to reverse safely.

For Micro-tab camera:

Mode 1



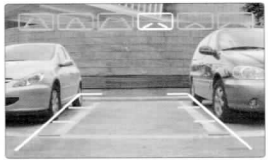
Mode 2



Mode 3

For flush mount camera:

Mode 4

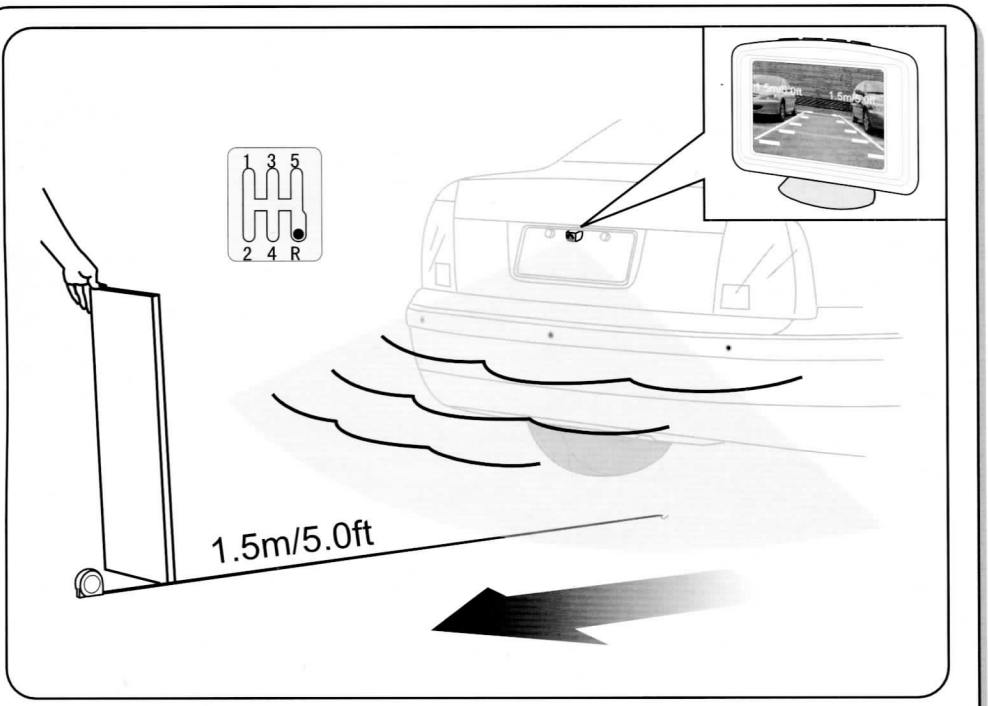


Mode 5

Mode 6

For micro-tab camera, please choose mode 1, 2 or 3.
For flush mount camera, please choose mode 4, 5 or 6.

Function test after installation



Use a flat board (1.0x1.5m/3x5ft) standing behind the car, reverse slowly to test each function respetively as shown in the manual.

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